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A PUBLIC TRUST: AN EXECUTIVE SUMMARY OF GREAT I(U)
GREAT RIVER ENVIRONMENTAL ACTION TEAM W A KNOTT SEP 80

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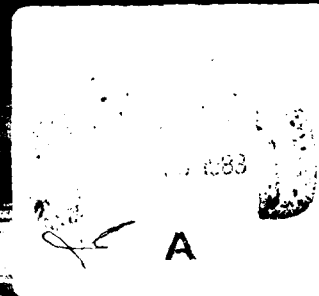
A PUBLIC TRUST

AN EXECUTIVE

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"It is this wilderness world that speaks most eloquently of the essence of the river, of its timelessness in an age that rushes in confusion, toward a future we cannot know. In the river's woods and sandy banks and islands, its still backwaters and rippling eddies, in the simple unconquerable power of its mile-wide tide, we find something we can know and in comprehending that, perhaps we can understand something more of ourselves."

***From Mark Twain's Mississippi,
by T. H. Watkins***

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THE GREAT UPPER MISSISS

The Mississippi River is an integral part of the American heritage. It once served as our Nation's western border, and expansion beyond it was a key turning point in our history. Through his writings, Mark Twain made the Mississippi River a household word. In recent years, it has been the center of a major controversy involving reconstruction and/or expansion of locks and dam 26.

The Upper Mississippi River is more than just a river; it is a unique resource and the best example of a multipurpose river in the United

States. Through congressional designation, it is the only inland river in the Nation serving as a Federal inland waterway for commercial shipping and a national wildlife and fish refuge system.

As an inland waterway, the Upper Mississippi River in the GREAT 1 area carried more than 20 million tons of cargo in 1975. Commodities such as grains, fertilizer, chemicals, fuel oil, coal, and other bulk materials made up the majority of shipments. Farm products, the major commodity, are not only important to the agricultural

economies of the bordering States, but to international trade and the Nation's balance of payments.

The wildlife and fish refuge on the Upper Mississippi River is part of the Mississippi Flyway, which is a vital link in the life cycle of three-quarters of the Nation's migratory waterfowl. The river's backwaters are "home" to tens of thousands of species of plants and animals.

The river is also a heavily used recreational resource, a source of water for human and industrial uses, and a recipient of our wastes. Finally,

MISSISSIPPI RIVER

for those who are served by the river in one or more of these ways, it is a significant element of our cultural heritage.

The accelerated sedimentation of open backwater areas is the most serious problem facing the river environment. These open water areas are vital fish and wildlife habitat and also serve as recreation areas. Since the completion of the lock and dam system in 1939, sedimentation has converted about one-fourth of the open backwater areas to marshland. Comparison of an 1895 sounding of

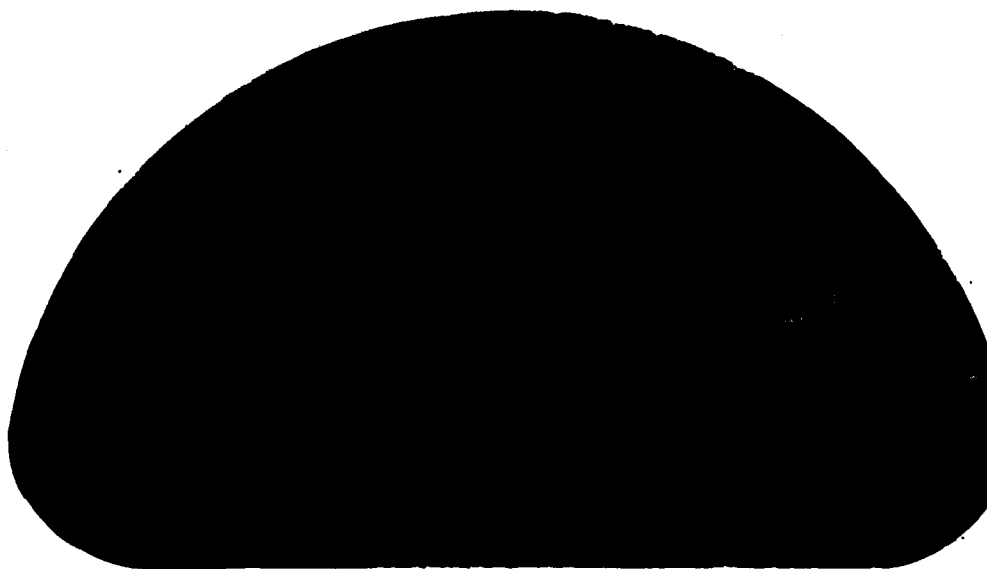
Lake Pepin with a recent sounding showed that one-third of this important recreation and wildlife resource has filled with sediment. Areas of Lake Pepin near Bay City which were once over 10 feet deep are now less than 4 feet deep. If nothing is done to slow the sedimentation process, it is estimated the backwaters will lose all of their open water areas within 50 to 250 years.

No one owns the Mississippi River—it is a resource for all the people as well as the many species of plants, fish, and wildlife that inhabit the river environment. It is, to use planners' terminology, a "multipurpose resource."

Problems have arisen because the various State and Federal agencies who have had management authority on the river have not always seen it that way. In 1924, Congress established the Upper Mississippi River Wild Life and Fish Refuge. The

primary purpose was to set aside lands and waters for waterfowl. In the 1930's, Congress authorized a series of locks and dams (29 in all) to aid in management of the river as a part of our inland waterway system for commercial navigation. As a result of these actions, millions of people come to the river annually for recreational pursuits, although recreation was not directly included in either of the above congressional actions. The river is also a recipient of our residential, commercial, and industrial wastes.

Clearly, agencies could not continue to address the river in piecemeal fashion and expect it to serve all users and uses without the eventual development of conflicts and problems. In the mid-1970's the various agencies involved began to question whether there was a better way to manage this resource.



THE GREAT RIVER ENVIRO

In 1974, under the leadership of the two principal management agencies on the river, the U.S. Army Corps of Engineers and the U. S. Fish and Wildlife Service, an interagency team was organized to identify and assess the problems associated with multipurpose use of the river and develop recommendations for improved management of the river. The Upper Mississippi River was divided into three study reaches (see Figure 1), each covered by its own study team called a Great River Environmental Action Team or GREAT. The first of these studies completed was the GREAT I study for the reach from head of navigation in Minneapolis-St. Paul, Minnesota, to Guttenberg, Iowa. The Team was organized in 1974 through add-on funds to the Corps of Engineers operation and maintenance budget and was formally authorized by Congress through Section 117 of the Water Resources Act of 1976.



From 1974 through 1980, this Team carried out an extensive program of research and pilot action projects, addressing total river resource requirements.

MENTAL ACTION TEAM

The GREAT I Team was made up of the following representatives:

U.S. Department of the Interior—Fish and Wildlife Service

U.S. Department of Defense—Army Corps of Engineers

U.S. Department of Agriculture—Soil Conservation Service

U.S. Department of Transportation—Coast Guard

U.S. Environmental Protection Agency

State of Iowa—Iowa Conservation Commission

State of Minnesota—Department of Natural Resources



State of Wisconsin—Department of Natural Resources

Minnesota-Wisconsin Boundary Area Commission—Nonvoting Member

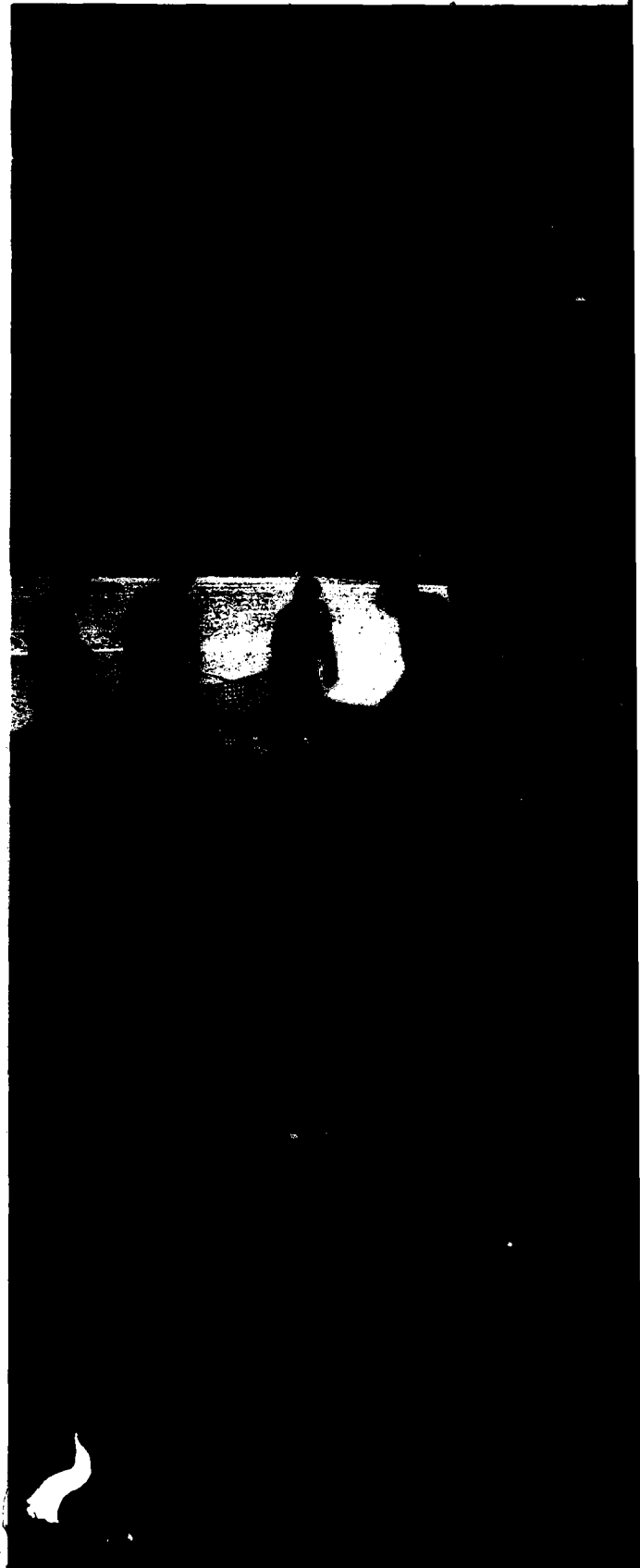
Upper Mississippi River Conservation Committee—Nonvoting Member


General Public

PUBLIC PARTICIPATION

Hunters, fishermen, boaters, local officials, towboat pilots, leaders in the environmental movement, civic leaders, newspaper editors, campers, engineers, mayors, and other members of the public have all been involved in the Great River Environmental Action Team.

The Public Participation and Information Program of GREAT I has been an *ongoing process*. From the initial Town Meetings in January 1975, the Public Participation Executive Board, participation in boat trips, on-site meetings, workshop participation, newsletter mailings, voting membership on the Plan Formulation Work Group, and review and comment on the draft reports, people from all walks of life (over 2,500 in all) have been involved. It is through the involvement of interested citizens that GREAT I has developed a product responsive to public needs and desires. GREAT took public participation seriously. It funded a full-time staff responsible *directly* to the Public Participation and Information Work Group, a citizen body of dedicated individuals.





Through this group, GREAT I held 11 public town meetings, 19 special hearings, 25 special community visits, and 41 citizen executive board meetings. The public participation staff attended 250 additional agency and citizen meetings to inform these groups of public concerns. The staff traveled over 40,000 miles to communicate with people about the study and it devoted 11,550 man-hours of time to the public involvement effort.

GREAT I was truly a model of States, Federal agencies, and the people working together.

INTERAGENCY COOPERATION

The endeavors of GREAT I have been completed and the study ended. But the end signals a new beginning.

Through an interagency team approach, GREAT I has tackled the major issues and problems which confront us and our use of the Mississippi River. The Team has made specific recommendations for the future of the Mississippi River.

The next several pages of this brochure identify the issues and present methods formulated and adopted by the GREAT I Team that will help resolve those issues.

This list does not include all the problems facing the Upper Mississippi River. What is presented here is a summary of discussions and recommendations addressed in the GREAT I main report.

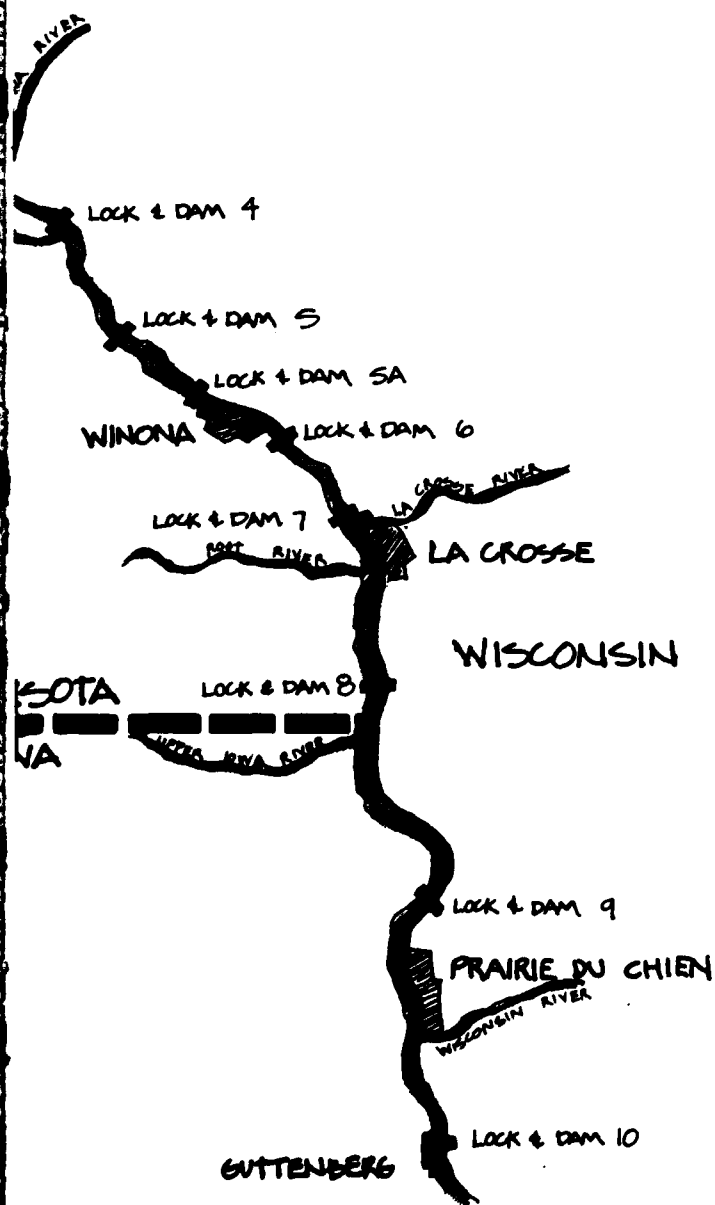
The main report presents the results of the GREAT I study and contains specific recommendations for the future management of the Upper Mississippi River system from Minneapolis-St. Paul, the head of navigation, to Guttenberg.

Among the recommendations is a specific detailed plan for maintenance of the 9-foot navigation project. The plan is the product of an interagency and interdisciplinary process. It was developed with the needs of our economy and our environment in mind and presents an approach for continued interagency cooperation. It includes specific sites for placement of all material expected to be dredged between now and 2025.



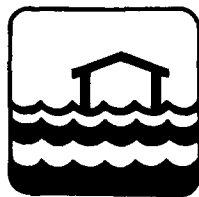
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If you desire further information, the following reports produced by GREAT I can help you. The agencies listed on the back cover can provide you with detailed information.



- Volume 1 — GREAT I Report
- Volume 2 — Technical Appendixes
 - A. Floodplain Management
 - B. Dredged Material Uses
 - C. Dredging Requirements
- Volume 3 — Technical Appendixes
 - D. Material and Equipment Needs
 - E. Commercial Transportation
- Volume 4 — Technical Appendixes
 - F. Water Quality
 - G. Sediment and Erosion
- Volume 5 — Technical Appendix
 - H. Fish and Wildlife
- Volume 6 — Technical Appendix
 - I. Recreation
- Volume 7 — Technical Appendixes
 - J. Public Participation
 - K. Plan Formulation
- Volume 8, Part I — Technical Appendix
 - L. Channel Maintenance — Narrative
- Volume 8, Part II — Technical Appendix
 - L. Channel Maintenance — Pool Plans and Site Descriptions: Minnesota River, St. Croix River, St. Anthony Falls, and Pools 1 and 2
- Volume 8, Part III — Technical Appendix
 - L. Channel Maintenance — Pool Plans and Site Descriptions: Pools 3 and 4
- Volume 8, Part IV — Technical Appendix
 - L. Channel Maintenance — Pool Plans and Site Descriptions: Pools 5, 5A, 6, and 7
- Volume 8, Part V — Technical Appendix
 - L. Channel Maintenance — Pool Plans and Site Descriptions: Pools 8, 9, and 10
- Volume 9 — Technical Appendix
 - M. Environmental Impact Statement

GREAT RECOMMENDS



FLOODPLAIN MANAGEMENT

Issue

The intrusion of man into the natural floodplain of the Upper Mississippi River has necessitated actions to protect human life and property. These actions have been principally the responsibility of the States of Iowa, Minnesota, and Wisconsin; the Federal Emergency Management Agency; and, through these bodies, the local units of government. Lack of uniform delineation of the floodplain and lack of consistency by the States in regulating floodplain development have caused difficulties in solving this problem in the large context of a river system. Long-term resolution depends on improving our techniques for analyzing impacts of specific actions on flood flows and coordinating the management activities of the States.

Answer

GREAT I has developed a set of interim base maps delineating the floodplain and investigated the use of computer models to analyze project impacts.

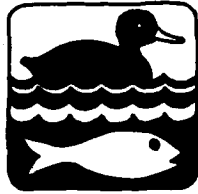
The three States should:

Develop uniform standards for floodplain management along the GREAT I stretch of the river.

To aid in this effort, Congress should:

1. Provide funds to the U.S. Geological Survey to prepare detailed topographic and hydrographic maps of the Upper Mississippi River corridor.
2. Provide funds to the Upper Mississippi River Basin Commission to carry out a feasibility study and for the ultimate development of a math model for floodplain management.





FISH AND WILDLIFE

Issue

The value of the Upper Mississippi River to fish and wildlife cannot be overstated. Besides being an internationally significant migration route for waterfowl, the river hosts 270 species of birds, 50 species of mammals, 123 species of fish, and 35 species of reptiles and amphibians. The main channel, islands, and backwaters were recognized for their national significance in 1924 when Congress established the Upper Mississippi River Wild Life and Fish Refuge. This refuge encompasses over 294,000 acres of land and water, much of it in pools 4 through 10 of the GREAT I area. While the initial construction and operation of the lock and dam system increased wetland acres, the acres are now being reduced as a result of sedimentation. If we want future generations to enjoy hunting, fishing, and observation of this magnificent resource, we need to take immediate action to reduce the trend of sedimentation and rehabilitate precious habitat already lost.

GREAT I has carried out several extensive pilot projects in backwater rehabilitation. This new knowledge can be applied to development of a system-wide rehabilitation program with additional information.

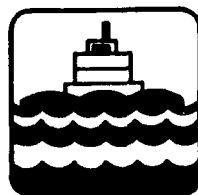
Answer

As already indicated, reducing the influx of fine sediments is critical to the solution of this problem. In addition, action is needed to preserve, protect, and enhance the wetland habitat in the system through increased management.

Congress should:

1. Provide additional funds to the U.S. Fish and Wildlife Service to develop a comprehensive management plan for the Upper Mississippi River Wild Life and Fish Refuge using the Geographic Information System. The plan, if funded, should address, among other things:
 - a. Identification and protection of critical backwater areas.
 - b. Evaluation of dredging and island creation in backwaters to recapture areas already lost to sedimentation.
 - c. Expansion and upgrading of facilities under the Bicentennial Land Heritage Program.
 - d. Identification and appropriate designation of primitive and natural areas.
2. Provide additional authority and funds to the Corps of Engineers to assist the States and the Fish and Wildlife Service in implementing wildlife enhancement projects.

GREAT RECOMMENDS



COMMERCIAL NAVIGATION

Issue

The commercial navigation system in the GREAT I area consists primarily of the 9-foot navigation channel, locks, fleeting areas and terminals, and the navigation vessels and barges themselves. This mode of transportation serves as a vital link in our national intermodal system. A 1975 study by the Upper Mississippi Waterway Association concluded that the river system handles 56 percent of the area's grain exports, 41 percent of the area's fertilizer, and 28 percent of the refined petroleum products. In addition, about one in every three people in the Upper Midwest is served by electricity generated by barged coal. An ensured navigation channel is essential to the continued vitality of this industry. Constraints that limit efficient developments should be evaluated and minimized or removed. Further issues include traffic congestion at locks 2 and 3, obstructive bridges, the lack of acceptable barge fleeting and terminal areas, and the complexity of the permit evaluation process required to pursue new commercial navigation developments.

Answer

If we, the people of the Upper Midwest, are to continue to produce and ship food for our international market and, at the same time, obtain needed fertilizer, petroleum, and coal to produce energy, we must continue to maintain and develop the waterway system to meet the growing needs of the industry.

Congress should:

1. Provide funds to the Corps of Engineers to continue to maintain the navigation channel in accordance with the GREAT I Channel Maintenance Plan.
2. Provide funds to the U.S. Department of Transportation to review Federal, State, and local regulations pertaining to commercial navigation, terminals, and support facilities with a view toward defining more clearly the areas of jurisdiction and proposing the elimination of conflict areas as appropriate.
3. Provide funds to minimize or eliminate the constraints to commercial navigation as identified by GREAT I.



RECREATION

Issue

Over 3 million people live along the Mississippi River in the GREAT I area, with nearly 2 million of these people located in the Minneapolis-St. Paul metropolitan area. By the year 2025, this total will grow to almost 5 million people. Already, over 8,000 boats are in marinas and private slips in the GREAT I area, and use of the river for boating, hunting, fishing, camping, etc., is extensive. Yet little has been done to provide an overall management process for this extensive activity. Because recreation management has not been a clear mandate of any of the agencies, little historical monitoring has been done to accurately determine demands and needs. GREAT I provided valuable base-line data by doing extensive surveys and facility inventories. Conclusions from work done to date indicate that recreational use of the river will grow and the need for management of this activity will be more important than ever. We must further identify recreation needs and conflicts. GREAT I has provided valuable information to start this process.

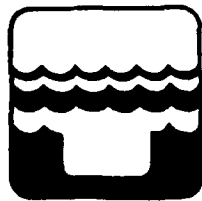
Answer

Clearly, increased responsibility and authority need to be given to the Corps of Engineers and the Fish and Wildlife Service to manage recreational use of the river.

Congress should:

1. Provide additional authority and funds to the Corps of Engineers to assist the States and the Fish and Wildlife Service in implementing projects for recreation.
2. Provide needed funds to the Corps of Engineers and the Fish and Wildlife Service to develop a comprehensive recreation management plan, using input from the appropriate States and based on the GREAT I site-specific recommendations.
3. Provide needed funds to the various agencies to continue monitoring of the recreational use of the river.

GREAT RECOMMENDS



CHANNEL MAINTENANCE

Issue

Under authorization of the River and Harbor Act of 1930, the Corps of Engineers operates and maintains a 9-foot navigation project for commercial navigation through the operation of a series of locks and dams and through annual maintenance dredging of the main channel. Average dredging volumes in the last 50 years have been almost 1.5 million cubic yards annually. Placement of this material, in the past, has been confined primarily to lands and waters in the river floodplain, resulting in direct and indirect destruction and damage to the river's vital wetland habitat. This is of concern to the State and Federal resource management agencies because it has reduced both the quantity and quality of natural habitat necessary for the numerous fish and wildlife species that depend on the river's ecosystem for life. Furthermore, State floodplain management agencies believe that the cumulative impact of this material placement has affected the flood storage capacity of the river floodplain. At the same time, the placement of dredged material has created and expanded the island system in the river, attracting recreational users.

A solution to this problem will require a more environmentally and economically sound channel maintenance program coupled with a reduction in sediment yields from the stream banks of the tributary rivers, particularly the Chippewa River in Wisconsin.

GREAT I has concluded that maintenance of the 9-foot channel navigation project is essential for a strong Upper Midwest economy. Thus, it is in our best interests to continue this project. However, we must consider other resource uses and users.

Answer

The GREAT I plan includes interim guidelines and a long-term (1985-2025) plan for placement of dredged material that calls for placement of material at selected interagency acceptable sites both in and out of the floodplain. These sites have been selected from an extensive inventory of potential sites because they will result in minimization of damage to wetlands (and in some cases enhancement of habitat), minimization of flood impacts, and maximum opportunity for removal of material for beneficial uses and because the sites can be used at an acceptable cost.

Congress should:

1. Appropriate to the Corps of Engineers sufficient funds for the Channel Maintenance Program to allow use of the sites selected by GREAT, even when use of these sites will result in additional costs to the program.
2. Provide funds for a continuing program of shoreline protection along the main stem and stream bank erosion monitoring and erosion reduction projects on the tributaries of the Upper Mississippi River. The feasibility study and demonstration project under way for reduction of downstream sedimentation and stream bank erosion on the Chippewa River should be completed and the recommended actions forwarded.



CULTURAL AND AESTHETIC RESOURCES

Issue

Preliminary information indicates that the Upper Mississippi River corridor is rich in cultural resources. Likewise, the natural beauty of the river corridor is a resource that has lacked sufficient attention. GREAT I has not addressed these resources, but does recognize their value.

Answer

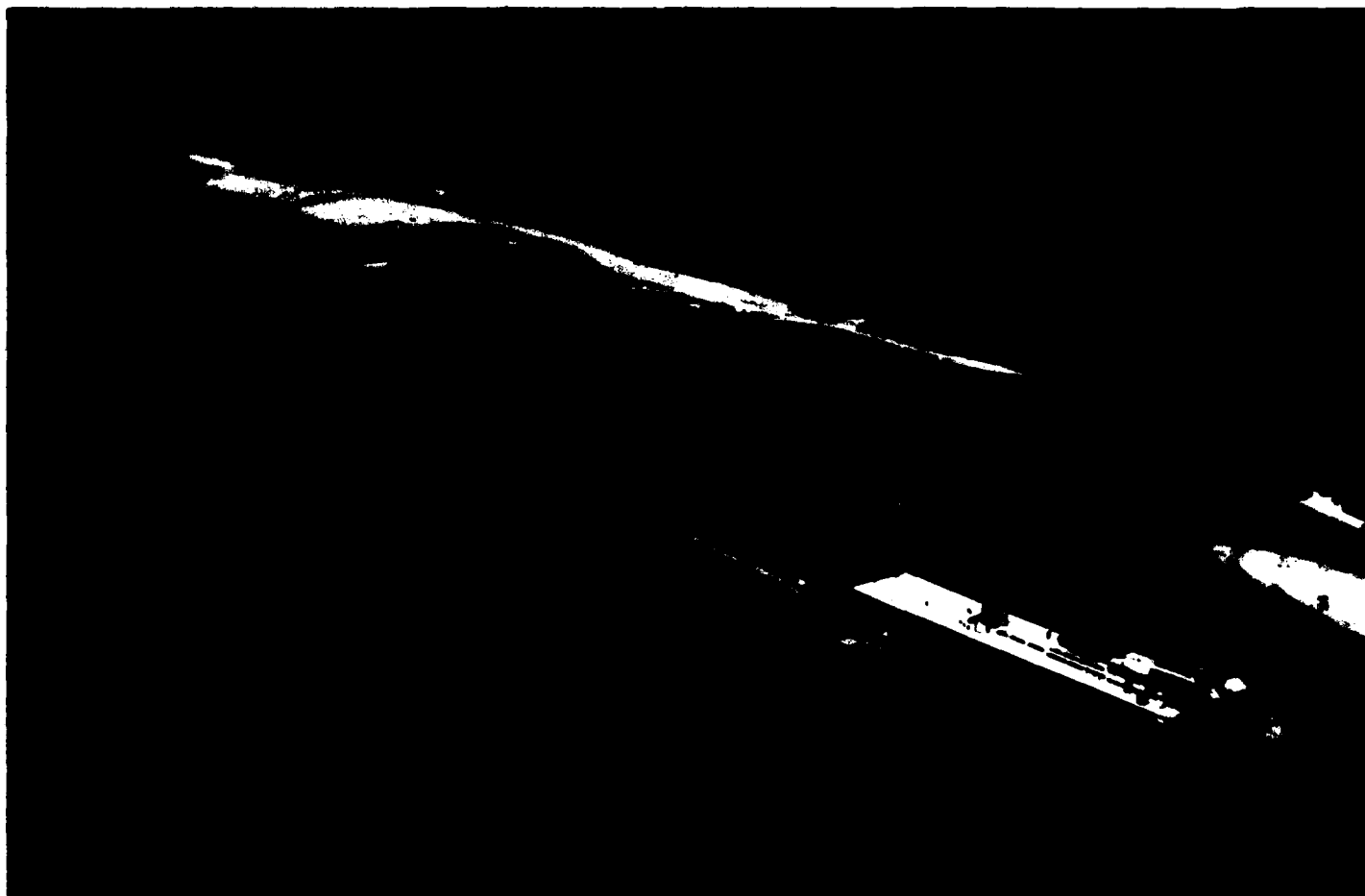
An inventory of cultural resources of the GREAT I area should be made and this information used in future river corridor project development.

Congress should:

Provide funds to the Corps of Engineers and Fish and Wildlife Service to carry out an extensive cultural resources inventory in cooperation with the States and local units of government owning or having jurisdiction over land in the corridor.

Agencies with management responsibility should:

Consider aesthetics in management plans.



GREAT RECOMMENDS



SEDIMENTATION

Issue

The most pervasive and damaging problem for the Upper Mississippi River is soil eroded from the basin's uplands which settles in the river's backwaters and Lake Pepin. Erosion coupled with the creation of a pooled river by the placement of the locks and dams has resulted in the loss of open water in the backwaters and reduction of the depth and storage capacity of Lake Pepin.

While sedimentation is a natural phenomenon, its effects on the Upper Mississippi River are accelerated by the pooling effects of the locks and dams.

While sedimentation cannot be stopped entirely, actions can be carried out to prolong the life of the river's aquatic environment. Thus, a total approach to river management must extend into the uplands away from the main stem.

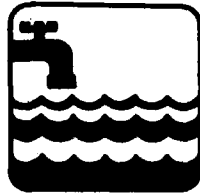
Answer

Great I studies have determined that most of the sediment clogging the river system comes from an area of approximately 9 million acres out of a total of 51 million acres in the drainage area. A program to reduce erosion and the resulting sedimentation should concentrate on this 9-million-acre area.

An effective program for reduction of sedimentation necessitates keeping the soil on the land whether it is agricultural, forest, pasture, or urban.

Congress should:

1. Provide increased funding to the Soil Conservation Service, Agricultural Stabilization Service, and the States to achieve maximum landowner participation in soil conservation. A goal of 80-percent adequately protected land (as opposed to the current level of 46-percent protected) should be attained. It is estimated that existing programs and technology could reduce upland erosion by one-third at an estimated initial cost of \$243 million and an additional \$44 million annually.
2. Provide funds for further development and implementation of new technology using a demonstration watershed. Funds should be provided to monitor soil loss and instream sediment flow and determine the potential of conservation tillage for erosion and sediment reduction.



WATER QUALITY

Issue

Water is the basic resource of the river. It is the major element of an aquatic environment and the lifeblood of the plant and animal environment. It is essential for human habitation, and it is the highway on which commercial vessels travel. The quality of life for all living organisms (man included) is directly related to the quality of the water in the river. Upper Mississippi River water quality is affected by a combination of direct discharges of wastewater (point source), upland and stream bank erosion (nonpoint source), and the quality of water from the tributaries.

Once pollutants reach the main stem of the river, water quality problems are further intensified through resuspension because of dredging activities, wind and wave action, and passage of commercial and recreational craft.

Answer

GREAT I studies have concluded that resolution of water quality problems must begin at the source. Abatement of point and nonpoint source pollution is necessary to address the overall problem.

The ongoing activities for pollution control, particularly the water quality planning program under Section 208 of the Clean Water Act, the control through point source permits, and the construction grants program for public wastewater treatment facilities, are supported by the GREAT I Team because their continuation is essential to the attainment and maintenance of high quality water.

Federal agencies should:

1. Maintain a list of substances that could threaten the river and environment if a spill occurred and enforce regulations on shipment of hazardous materials.
2. Establish sanitary pump-outs and trash pickup points for commercial and recreational vessels in suitable areas.

COOPERATION FOR THE

Role of the UMRBC

The GREAT I study has proven that Federal agencies, the States, and the public can work together and approach problem-solving in the best interests of total river resource management. While the National Environmental Policy and Fish and Wildlife Coordination Acts mandate that agencies develop a working relationship within certain areas, GREAT has expanded that idea into all areas of river resource management. Under the organizational umbrella of the UMRBC, GREAT, once a concept, is now a reality. GREAT has become a national model for cooperation in the area of water resource planning.

GREAT recommends that the cooperative mechanism it has developed be continued as the best way to coordinate the implementation of its recommendations. It strongly supports the following specific post-GREAT actions.

Action 1

The Great River Study Committee of the UMRBC should expand its responsibilities to complete a total river resource management plan composed of the following 10 components:

- Fish and Wildlife Resources
- Water Quality
- Channel Maintenance
- Sedimentation
- Public Participation
- Cultural Resources
- Floodplain Management
- Aesthetics
- Commercial Transportation
- Recreation

To accomplish this task, the Great River Study Committee should establish and seek funds for additional agency participation and support staff.

UTURE



Action 2

The member agencies of GREAT should establish, through letters of agreement, an ongoing river resource management team to plan and promote the implementation of the GREAT I recommendations. Each member agency should contribute staff and fund its own participation. The ongoing river resource management team would guide the Corps of Engineers in implementing the interim guidelines and the recommended material placement plan through continuation of the on-site inspection team notification and coordination procedure.

Action 3

Each year, the member States and Federal agencies should prepare a detailed plan of action outlining immediate action items and funding needed to begin implementation of approved GREAT I recommendations. Agencies should include, as necessary, requests for new authority and/or appropriations as part of their action plans.

These plans would be coordinated through the ongoing river resources management team.

A PUBLIC TRUST

GREAT has established the ground rules for working together. It is imperative now for all of us to move forward, actively pursuing implementation of the GREAT I recommendations in a unified manner.

For over 5 years, qualified individuals from various professions and agencies have met in conference rooms and on dredged material placement islands, working together to come up with solutions to the problems facing the resource and resource users. The findings of GREAT cannot be taken lightly. The call to action must be taken seriously.

We leave you—the Congress, Federal agency and State leaders, and the public—with these final words.



TO CONGRESS:

- *Provide the necessary funding for the 9-foot navigation project to allow implementation of the GREAT I Channel Maintenance Plan.

- *Provide new and continued funding to achieve maximum implementation of upland and stream bank erosion measures to help minimize dredging, reduce backwater sedimentation, and reduce nonpoint source pollution.

- *Provide authority and additional funding to promote the full development of fish and wildlife and recreation comprehensive management plans and implement projects for fish and wildlife and recreation.

TO STATES AND FEDERAL AGENCIES:

*Establish, through letters of agreement, an ongoing river resource management team.

*Develop immediately annual action plans addressing necessary activities and funding needed to implement those actions, further studies, and policy changes recommended in the final GREAT I report.

*Coordinate action plans through participation in the Great River Study Committee of the UMRBC and the ongoing river resource management team.

TO THE PUBLIC:

We call upon you as individuals, formal interest groups, civic leaders, or elected officials to clearly and loudly voice your support to your State and Federal elected officials. Your endorsement of these recommendations is imperative. The Mississippi River is a vital resource worthy of your support. It is in your hands. You can help this resource survive for future generations as a multipurpose system.

AN OPEN LETTER

In 1976, Congress authorized the Great River Study for the Upper Mississippi River from the head of navigation to Cairo, Illinois. The objective of this study is to develop a river system management plan incorporating total river resource requirements. The GREAT I study, covering the northernmost segment of the river, has been completed. The report presents the results of that study and contains specific recommendations for future management of the Upper Mississippi River system from the head of navigation to Guttenberg, Iowa.

Among the recommendations is a specific detailed plan for maintenance of the 9-foot navigation project. The plan is the product of an interagency and interdisciplinary study process. It was developed with the needs of our economy and our environment in mind. It sets forth a process for continued interagency cooperation and includes specific sites for placement of all material expected to be dredged between now and 2025.

This report also contains recommendations for future management of the Upper Mississippi River with full recognition of its importance as a truly multipurpose resource.

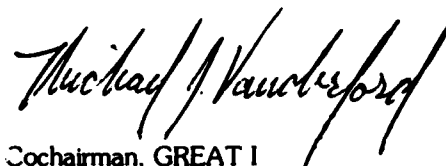
The Upper Mississippi River is a unique system. It includes a key part of the inland waterway system and a nationally famous fish and wildlife refuge and is a recreational resource used by millions of people each year. For the people of our Nation, the river is a part of our heritage—affectionately called "The Father of Waters."

The Great River Study has been a national model in interagency team work and has been strongly supported by our agencies as well as by the other State and Federal agencies involved. The public has also played an important role in developing this report.

We urge you to seriously consider this report and its emphasis on continued management in a balanced manner and support the needs of the agencies involved in their efforts to implement a program of total river resource management.



Cochairman, GREAT I
U.S. Army Corps of Engineers



Cochairman, GREAT I
U.S. Department of the Interior
Fish and Wildlife Service

GREAT RIVER ENVIRONMENTAL ACTION TEAM
(GREAT II)

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St. Paul, MN 55101 - Phone 612-725-5942

IF YOU NEED ADDITIONAL INFORMATION. . .

U.S. Army Corps of Engineers
1135 U.S. Post Office & Custom House
St. Paul, Minnesota 55101

U.S. Fish and Wildlife Service
538 Federal Bldg. & U.S. Court House
316 North Robert Street
St. Paul, Minnesota 55101

Department of Transportation
Second District Coast Guard
Federal Building
1520 Market Street
St. Louis, Missouri 63103

Environmental Protection Agency
230 South Dearborn Street
Chicago, Illinois 60604

Soil Conservation Service
200 Federal Bldg. & U.S. Court House
316 North Robert Street
St. Paul, Minnesota 55101

Minnesota-Wisconsin Boundary Area
Commission
619 Second Street
Hudson, Wisconsin 54016

Upper Mississippi River Conservation
Committee
1504 Third Avenue
County Office Building
Rock Island, Illinois 61201

State of Iowa
Iowa Conservation Commission
Wallace State Office Building
East Ninth and Grand
Des Moines, Iowa 50319

State of Minnesota
Minnesota Department of Natural Resources
Centennial Office Building
St. Paul, Minnesota 55155

State of Wisconsin
Department of Natural Resources
Post Office Box 7921
Madison, Wisconsin 53707

PHOTO CREDITS

	<i>Photo Number</i>
<i>Waterways Journal</i>	Cover
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U.S. Fish and Wildlife Service	4, 8
Alan R. Fenger, Dan McGuiness & Associates	5, 9
Soil Conservation Service, U.S. Department of Agriculture	6, 19
Rock Island District, Corps of Engineers	7
St. Paul District, Corps of Engineers	10, 15, 18
Wisconsin Department of Natural Resources	11
Daniel W. McGuiness, Dan McGuiness & Associates	12, 13, 20

A FINAL WORD

The Upper Mississippi River is a magnificent resource owned by no one yet owned by everyone. We have made the river work for us. Now we must work for the river.

As Mark Twain said, if he had known what was to be required of his faculties to "learn" the river, he would not have the courage to begin. GREAT did have the courage to begin.

We now know much more about this resource than we did in 1974. Above all, we have learned that we all have a responsibility to work together for this resource. The abuses of the past can be stopped and there are actions we can take to protect, preserve, and enhance this mighty yet fragile phenomenon we call "The Father of Waters." We call upon you, the Congress, agency leaders, and citizens, to continue to work on behalf of a resource that has served us well.



